

### **REMARKS**

By this Amendment, Fig. 2 is corrected pursuant to the attached replacement sheet, claims 1-5, 8, 9, 11 and 14 are amended, and claims 15 and 16 are added. Accordingly, claims 1-16 are pending. Reconsideration of the present application is respectfully requested.

Claims 1-4 are amended to reflect the changes to claim 5. Claims 15 and 16 are added to further delineate the scope of the invention. Support for new claims 15 and 16 can be found, for example, at paragraphs [024] through [025].

The Office Action indicates that none of the certified copies of the priority documents have been received in this National Stage application from the International Bureau. Under PCT Rule 17.2(a), the International Bureau is required to furnish a copy of the priority document at the specific request of the designated Office. It is respectfully requested that the Examiner acknowledge receipt of the certified copy.

#### **I. The Drawings Satisfy All Formal Requirements**

The Office Action objects to Fig. 2 for not including text labels in block circuits 1 and 8-10. Fig. 2 is corrected by the attached replacement sheet to obviate the objection. Specifically, text labels have been added to block circuits 1 and 8-10. No new matter has been added. Withdrawal of the objection to the drawings is respectfully requested.

#### **II. The Claims Satisfy the Requirements of 35 U.S.C. §112**

The Office Action rejects claims 5-14 under 35 U.S.C. §112, first paragraph, as not enabled. Claim 5 is amended to obviate the rejection.

Specifically, claim 5 is amended to recite “a control device which is adapted to select a stored adjustment parameter depending on said determined measure of the frequency response and on a nominal frequency response fed to the circuit arrangement.” Applicants point out that “measure” as recited in claim 5 is used to designate a characteristic value or a set of

characteristic values for the frequency response to the filter. While it is clear to a person skilled in the art that this measure may indeed be the whole frequency response, the preferred embodiments describe a time constant that is determined as a measure of the frequency response (see paragraph [009] of the present specification). This measurement of the time constant as a measure for the frequency response is described in paragraphs [024] to [026], *i.e.* the measure is obtained by applying a step signal to the input of the filter, starting a counter and measuring the output voltage of the filter. These steps may be easily realized by a person skilled in the art. Accordingly, withdrawal of the rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

The Office Action rejects claims 5-14 under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 5 and 8 are amended to obviate the rejection, and the remaining claims are traversed.

The Amendment deletes the phrase “the circuit including” and recites “a memory arrangement” as a separate element in claim 5. Also, the term “can” is replaced with the phrase “is adapted to.” Finally, the phrase “set up to take” is deleted and claim 5 reads “a control device which is adapted to select a stored adjustment parameter depending on said determined measure of the frequency response and on a nominal frequency response fed to the circuit arrangement.” Applicants point out that the selection of the nominal frequency response corresponds to arrow 11 in Fig. 2, which is described in paragraph [027] of the specification, that is a desired frequency response, *e.g.* a desired cut-off frequency, is selected externally.

Regarding claim 6, Applicants respectfully assert that one skilled in the art would understand that the adjustable capacitor includes at least one invariable base capacitor and an adjustable capacitor component. In Fig. 1, the adjustable capacitor comprises invariable

components 2 and variable components 3. This is, for example, described in paragraph [013] and paragraphs [020] to [022]. In this respect, it should be noted that “capacitor” in the context of the claims does not necessarily relate to a single element, but the variable capacitor, as shown in detail in Fig. 1, and may comprise several capacity elements (reference numerals 2, 6) and switches 7.

With respect to claim 8, Applicants amend it to replace “which can store” to “for storing. Accordingly, the amendment obviates the rejection to claim 8.

Regarding claims 13 and 14, Applicants respectfully assert that the function of the reference capacitor and the meaning of the word “standard capacitor” is clearly described in paragraphs [007] to [009] of the specification. In particular, standard capacitors in this context mean that all the capacitors have the same nominal value.

While of course the adjustable capacitor is adjustable, in Fig. 1 it is clearly shown that the adjustable component 3 comprises a plurality of capacitors 6 having fixed values. Therefore, the capacitor which determines frequency response (basically capacitor 3) indeed is made up of, *i.e.* comprises, capacitors having a fixed value, in the case of claim 14 standard capacitors of the same value. To expedite prosecution of the present application, however, the word “standard” is deleted since the scope of claim 14 provides capacitors that have the same value.

Furthermore, claims 9 and 11 are corrected to comply with the changes made to claim 5. Accordingly, withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

### **III. The Claims Define Allowable Subject Matter**

The Office Action rejects claims 1-11, 13 and 14 under 35 U.S.C. §102(b) over U.S. Patent No. 5,245,646 to Jackson et al. ("Jackson"); and claim 12 under 35 U.S.C. §103(a) over Jackson. These rejections are respectfully traversed.

Applicants respectfully assert that the filter arrangement disclosed by Jackson differs significantly from the present invention as recited by the independent claims, so that it seems that the rejection is based on a misunderstanding or misinterpretation of either the present invention or the applied reference.

As explained in paragraph [004] of the specification, the present invention addresses the need for an active filter wherein the frequency response may be set to one of a plurality of frequency responses. In the example, it is stated that VDSL systems require a low-pass filter with a cut-off frequency adjustable between 8 and 12.44 MHz.

Therefore, as stated in paragraph [005], the present invention provides a circuit arrangement and a method for adjusting an active filter which allow one frequency response from a plurality to be set with a high level of accuracy given little circuit complexity.

This is also reflected in present independent claims 1 and 5, wherein the adjustment parameter is based, *inter alia*, on a nominal frequency response fed to the circuit arrangement (claim 5). In this respect, it should be noted that present claim 1 is amended to clarify the term "from a memory arrangement," by adding the word "receiving" between "a" and "prescribable." Consequently, a feature of the present invention is that the frequency response may be selected externally.

In contrast, Jackson presents a tuning circuit which compensates for process variations affecting the time constant of the analog filter (see col. 2, lines 59-64). This is also described in

more detail at col. 5, lines 35-40. Therefore, Jackson does not relate to filter characteristics of which may be chosen from a plurality of possible frequency responses, but to a filter with a fixed response which is tuned to compensate for process variations.

For the same reasons as discussed above with respect to claims 1 and 5, Applicants respectfully assert that new claim 15 and 16 are allowable and further distinguish the claims over Jackson.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. §§102 and 103 should be withdrawn because the applied reference does not teach or suggest each feature of independent claims 1 and 5.

As pointed on in MPEP §2131, “[t]o anticipate a claim, the reference must teach every element of the claim.” Thus, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987).” Similarly, MPEP §2143.03 instructs that “[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974).”

For at least these reasons, it is respectfully submitted that independent claims 1 and 5 are patentable over the applied reference. The remainder of the claims that depend from independent claims 1 and 5 are likewise patentable over the applied reference for at least the reasons discussed above, as well as for the additional features they recite.


**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-16 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact undersigned representative at the telephone number below.

DATED this 18<sup>th</sup> day of August, 2004.

Respectfully submitted,



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